#### TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

**Major Offered At:** 

CORVALLIS

**ECAMPUS** 

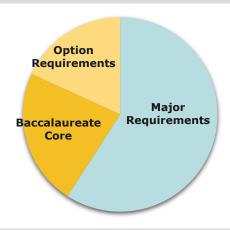
# Central Oregon Community College

#### **Natural Resources Major with Policy & Management Option**

Natural Resources students are passionate about the world around them. They collaborate to preserve and protect the natural world for future generations.

This option prepares students for careers in the broad arena of natural resource and environmental conservation, with an emphasis on the social and political aspects of resource issues.

#### Your Bachelor's Degree (BS) in Natural Resources



- A minimum of 180 credits are required for graduation;
   60 must be upper division (300 and 400-level courses).
- A maximum of 135 credits earned at a community college may be applied toward a bachelor's degree at OSU.
- Only courses with letter prefixes and numbers above 100 are accepted.
- More info: forestry.oregonstate.edu/undergraduateprograms/natural-resources/policy-and-management

# **Courses Required for Natural Resources Major**

NR Core Requirements	COCC Course	OSU Course	Notes
Complete one course per category	cocc course		
Consensus and Natural Resources		FES 485	Available online at OSU
Managing Nat Res for the Future		NR 201	Available online at OSU
Natural Resource Problems & Solutions		NR 202	Available online at OSU
Natural Resources Decision Making		NR 455	Available online at OSU
Advanced Communication:			
Communication in Global Agriculture		AG 351	Available online at OSU
Intro to Communication Theory		COMM 321	
Small Group Problem Solving		COMM 322	
Communication in Organizations		COMM 324	
Intercultural Communication		COMM 326	
Non-Verbal Communication		COMM 328	Available online at OSU
Communication and Culture in Cyberspace		COMM 385	Available online at OSU
Theories of Conflict and Conflict Management		COMM 440	
Bargaining and Negotiating Processes		COMM 442	
Forest as Classroom		FES 430	Available online at OSU
Effective Comm of Environmental Change Sci		GEOG 453	
Critical thinking for NR Challenges		NR 312	
Environmental Interpretation		TRAL 493	Available online at OSU
Science Writing		WR 362	Available online at OSU
Environmental Writing		WR 462	
Biology I			
General Biology I with Lab	BI 101	BI 101	Available online at OSU
Introduction to Biology I		BI 204	Available online at OSU
Principles of Biology: Cells	BI 221	BI 221	



NR Core Requirements (continued) Complete one course per category	COCC Course	OSU Course	Notes
Biology II			
General Biology II with Lab	BI 102	BI 102	
Introduction to Biology II	DT 222	BI 205	Available online at OSU
Principles of Biology: Organisms	BI 222	BI 222	
<b>Biology III</b> General Biology III with Lab	BI 103	BI 103	
Introduction to Biology III	B1 103	BI 206	Available online at OSU
Principles of Biology: Populations	BI 223	BI 223	/ transfer of mile at 555
Chemistry			
Intro to Chemistry I	CH 104	CH LDT	
General Chemistry I with Lab		CH 121	Available online at OSU
General Chemistry (Majors) I with Lab	CH 221 (required for 200 Biology at OSU)	CH 231 & 261	Available online at OSU
Climate Science	Biology at 030)		
COCC Course: Weather & Climate	GEOG 279		
Climate Science		ATS 201	Available online at OSU
Global Change Biology		FW 345	
Climatology		GEOG 323	Available online at OSU
Intro to Climate Change  Earth or Soil Science		SUS 103	Available online at OSU
Soil Science		CSS 205	Available online at OSU
The Solid Earth		GEO 101	Available online at OSU
Physical Geology	G 201	GEO 201	
Earth Systems Science	G 202	GEO 202	
Environmental Geology		GEO 221	Available online at OSU
Physical Geography	FOD 200	GEOG 102	Available online at OSU
Soil Science with Lab Soil Science with Forest Soils Lab	FOR 208 FOR 208	SOIL 205 & 206 SOIL 205 & FOR 206	
Ecology	1 OK 200	301E 203 & 1 OK 200	
Marine Ecology		BI 351	Available online at OSU
General Ecology		BI 370	Available online at OSU
Plant Ecology		BOT 341	Available online at OSU
Forest Ecology		FES 341	Available online at OSU
Mathematics Elementary Functions	MTH 112Z	MTH 112Z	Available online at OSU
Calculus for Mgmt, Life, and Social Science	MTH 241	MTH 241	Available online at OSU
Math for Mgmt, Life, and Social Science	MTH 245	MTH 245	Available online at OSU
Differential Calculus	MTH 251	MTH 251	Available online at OSU
Statistics			
Principles of Statistics	STAT 243Z	ST 243Z	Available online at OSU
Intro to Statistical Methods  Animal ID		ST 351	Available online at OSU
Terrestrial Vertebrate ID & Natural History		FOR 210	
Forest Entomology		FES 412	
Systematics of Birds	FW 212	FW 312	Available online at OSU
Systematics of Fishes		FW 316	Available online at OSU
Systematics of Mammals	FW 218	FW 318	Available online at OSU
Biology of Insects Herpetology		Z 365 Z 473	Available online at OSU
Aquatic Entomology		Z 477	Available offilite at 030
Environ. Assessment & Planning			
Agriculture & Environmental Predicaments		CROP/SOIL/SUS 325	
Ecological Restoration		FES/FW 445	Available online at OSU
Ecosystems Services		FW 462	Available online at OSU
Land Use Planning for Sust. Communities Land Use in the American West		GEOG 250	Available online at OSU
Planning Principles for Resilient Communities		GEOG 450 GEOG 451	
Sustainable Site Planning		GEOG 451	Available online at OSU
Wildland restoration and Ecology		RNG 421	Available online at OSU
Habitat Analysis I		RNG 457	Available online at OSU
Rangeland Management and Planning		RNG 490	Available online at OSU
Sustainability Assessment		SUS 304	Available online at OSU
Sustainable Communities Planning for Sustainable Recreation		SUS 350 TRAL 456	Available online at OSU
Planning for Sustainable Recreation  Planning for Sustainable Tourism		TRAL 456	
Scientific Methods for Analyzing NR Problems		NR 325	Available online at OSU

NR Core Requirements (continued)	COCC Course	OSU Course	Notes
Complete one course per category			
Fish & Marine Sciences Intro to Marine Biology Biology of Marine Mammals Oceans in Peril Marine Ecology Intro to Population Dynamics Mgmt Principles of Pacific Salmon in the NW Coastal Ecology and Resource Management Fishery Biology Fish Ecology Wildlife Ecology Wildlife Ecology Oceanography Coastal Oceanography Forestry	GS 108	BI 150 FW 302 BI 347 BI 351 FW 320 FW 323 FW 426 FW 454 FW 473 FW 481 OC 201 OC 332	Available online at OSU
International Forestry Forest Biology Forest Ecology Forest Types of the Northwest Urban Forestry Wildland Fire Ecology Ecological Restoration Biodiversity Conservation in Managed Forests Agroforestry Topics in Wildland Fire Silviculture Principles	FOR 240A FOR 110 + FOR 210	FE/FOR 456 FES 240 FES 341 FES 342 FES/HORT 350 FES 440 FES/FW 445 FES/FW 452 FES/NR 477 FOR 346 FOR 441	Available online at OSU
Land & Water Watershed Processes Forest Watershed Management Integrated Watershed Management Freshwater Ecology and Conservation Wetlands and Riparian Ecology Minerals, Energy, Water and the Environment National Park Geology and Preservation Global Change and Earth Sciences Introduction to Water Science & Policy Water Resources Management in the U.S. International Water Resource Management Riparian Ecohydrology and Management Ecosystems of Wildland Soils Soil Systems and Plant Growth World Soil Resources Soil Morphology and Classification		FE 430 FE 434 FW 326 FW 456 FW 479 GEO 306 GEO 307 GEO 308 GEOG 340 GEOG 440 GEOG 441 RNG 455 SOIL 366 SOIL 388 SOIL 395 SOIL 466	Available online at OSU  Available online at OSU
Range Wildland Fire Ecology Ecological Restoration Topics in Wildland Fire Rangeland Ecology and Management Range Ecology I – Grasslands Range Ecology II – Shrub Lands Wildland Restoration and Ecology Rangeland Analysis Rangeland-Animal Relations Rangeland Management and Planning	FOR 110 + FOR 210	FES 440 FES/FW 445 FOR 346 RNG 341 RNG 351 RNG 352 RNG 421 RNG 441 RNG 442 RNG 490	Available online at OSU
Vegetation ID COCC Course: General Botany Plant Systematics Agrostology Flora of the Pacific Northwest Mycology Dendrology Landscape Plant Materials I: Decid & Conifers Landscape Plant Materials II: Shrubs Wildland Plant Identification	BI 202 FOR 241A or 241B	BOT LDT BOT 321 BOT 414 BOT 425 BOT 461 FES 241 HORT 226 HORT 228 RNG 353	Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU

NR Core Requirements (continued)	COCC Course	OSU Course	Notes
Complete one course per category		OSO Course	Notes
Wildlife Management			
COCC Course: Animal Behavior	PSY 227		
Principles of Fish & Wildlife Conservation	FW 251	FW 251	Available online at OSU
Introductory Population Dynamics		FW 320	Available online at OSU
Applied Community and Ecosystem Ecology		FW 321	Available online at OSU
Wildlife in Agricultural Ecosystems		FW 435	Available online at OSU
Avian Conservation and Management		FW 451	Available online at OSU
Biodiversity Conservation in Managed Forests		FES/FW 452	Available online at OSU
Mammal Conservation and Management		FW 458	Available online at OSU
Wildlife Ecology		FW 481	Available online at OSU
Animal Behavior		Z 350	Available online at OSU
Ethics & Philosophy		2 333	,
Ecosystems Science of the PNW Indians		AG 301	Available online at OSU
Anthropology, Health, and the Environment		ANTH 352	Available online at OSU
Ecological Anthropology		ANTH 477	Available online at OSU
Natural Resources and Community Values		ANTH 481	Available online at OSU
Anthropology of International Development		ANTH 482	Available offille at 030
Multicultural Perspectives in NR		FW 340	Available online at OSU
Environmental Justice		GEO 309	Available online at OSU
Environmental History of the United States		HST 481	Available online at OSU
Critical Thinking for NR Challenges		NR 312	Available offilite at 030
Nature in Storytelling Over the Centuries		NR 380	Available online at OSU
Environmental Ethics		PHL 440	Available online at OSU
World View and Environmental Values		PHL/REL 443	Available online at OSU
Natural Resource Policy		PHL/KLL 443	Available offilite at 030
Environmental Law		AEC 432	Available online at OSU
Public Lands Policy & Management		FES 486	Available online at OSU
		FOR 460	Available offille at 050
Forest Policy		FOR 461	
Forest Policy Analysis			Available online at OCII
Fish & Wildlife Law and Policy		FW 415	Available online at OSU
Introduction to Ocean Law		FW 422	Available online at OSU
U.S. Energy Policy		PS 473	Available online at OSU
Environmental Politics and Policy		PS 475	Available online at OSU
International Environmental Politics & Policy		PS 477	Available online at OSU
Political Issues		ENT// 10 DT 200	
Plagues, Pests, and Politics		ENT/HORT 300	Available online at OSU
Endangered Spec, Society and Sustainability		FW 350	Available online at OSU
When Science Escapes the Lab		NR 351	
The Politics of Climate Change		PS 455	Available online at OSU
Environmental Politics and Policy		PS 475	Available online at OSU
Science and Politics		PS 476	Available online at OSU
International Environmental Politics & Policy		PS 477	Available online at OSU
Wilderness Management		TRAL 352	Available online at OSU
Economics			
Intro to Environmental Economics & Policy		AEC 250	Available online at OSU
Intro to Microeconomics	EC 201	ECON 201	Available online at OSU

NR Core Requirements (continued) Complete one course per category	COCC Course	OSU Course	Notes
Social Issues			
Human Impacts on Ecosystems		BI 301	
Human Ecology		BI 348	
Issues in Natural Resource Conservation		FES 365	Available online at OSU
Global Crises in Resource Ecology		FW 325	Available online at OSU
Sustainability for the Common Good		GEOG 300	Available online at OSU
Climate Change, Water and Society		GEOG 240	
Transforming Environmental Conflicts		GEOG 241	
Resilience-Based Natural Resource Mgmt		GEOG 430	
Global Resource Development		GEOG 431	
When Science Escapes the Lab		NR 351	
Oceans, Coasts & People		OC 333	Available online at OSU
Social Dimensions of Sustainability		SOC 381	Available online at OSU
Rural Sociology		SOC 475	
Environmental Sociology		SOC 480	Available online at OSU
Society and Natural Resources		SOC 481	Available online at OSU
Social Dimensions of Sustainability		SUS 420	Available online at OSU
Recreation Resource Management		TRAL 251	Available online at OSU
Outdoor Recreation on Public Lands	FOR 251	TRAL 351	
Wilderness Management		TRAL 352	Available online at OSU
Nature, Eco, and Adventure Tourism		TRAL 353	
Communities, Natural Areas, and Tourism		TRAL 354	
Parks & Protected Areas		TRAL 357	Available online at OSU
Women and Natural Resources		WGSS 440	Available online at OSU
Spatial Analysis			
Precision Agriculture		CROP/HORT 414	Available online at OSU
GIS and Forest Engineering Applications	GEOG 265	FE 257	Available online at OSU
Survey of Geographic Information Systems		FW 303	Available online at OSU
Foundations of Geospatial Science & GIS	GEOG 265	GEOG 201	Available online at OSU
Geoscience I: GIS and Theory	GEOG 266	GEOG 360	Available online at OSU

#### Requirement **COCC Course OSU Course** Notes Complete one course per category unless otherwise noted Measurements Research Methods in Social Science FES 422 Available online at OSU Research Methods PS 300 Available online at OSU Social Science & NR: choose 2 courses Intro to Climate Change Economics & Policy **AEC 122** Environmental Law, Policy & Economics AEC 253 Ecosystems of the Pacific NW Indians AG 301 Available online at OSU **Ecological Anthropology ANTH 477** Available online at OSU Mgmt Principles of Pacific Salmon in NW FW 323 Available online at OSU Multicultural Perspectives in Natural Resources FW 340 Available online at OSU Climate Change, Water and Society GEOG 240 Land Use Planning for Sustainable Community GEOG 250 Available online at OSU Sustainability for the Common Good Available online at OSU GEOG 300 Geography of Natural Hazards Available online at OSU **GEOG 350** Resilience-Based Nat Resource Management **GEOG 430** Land Use in the American West **GEOG 450** Plan Principles and Pract for Resilient Comm **GEOG 451** Sustainable Site Planning **GEOG 452** Available online at OSU Critical Thinking for NR Challenges NR 312 When Science Escapes the Lab NR 351

SOC 204

SOC 480

SOC 481

SUS 331

**Courses Required for Policy & Management Option** 

Available online at OSU

Available online at OSU

Available online at OSU

Available online at OSU

Intro to Sociology

**Environmental Sociology** 

Society and Natural Resources

Sustainability, Justice, and Engagement

Requirement			
Complete one course per category unless	COCC Course	OSU Course	Notes
otherwise noted			
Resource Economics			
Natural Resources Economics & Policy		AEC 351	Available online at OSU
Environmental Economics & Policy		AEC/ECON 352	Available online at OSU
Intro to Coastal & Marine Resource Economics		AEC 353	Available online at OSU
Rural Development Economics & Policy		AEC 454	
Econ of Traditional and Renewable Energy		ECON 466	Available online at OSU
Forest Resource Economics I		FOR 329	7.174.1142.12 0.1111.12 4.1 0.2 0
Economics & Policy of Wildland Fire		FOR 431	Available online at OSU
Economics of Recreation & Tourism		TRAL 432	/ Wallable of life at 350
NR Policy: Choose 12-13 credits from at		11012 102	
least two departments			
Natural Resource Economics & Policy		AEC 351	Available online at OSU
Environmental Econ & Policy		AEC/ECON 352	Available online at OSU
Intro to Coastal and Marine Resource Econ		AEC 353	Available online at OSU
Environmental Law		AEC 432	Available online at OSU
Marine Economics		AEC 452 AEC 452	, wanable offilie at 000
Issues in Natural Resource Conservation		FES 365	Available online at OSU
Public Lands Policy and Management		FES 486	Available online at OSU
Econ and Policy of Forest Wildland Fire		FOR 431	Available offine at 050
Forest Policy		FOR 460	
Forest Policy Analysis		FOR 461	
Endangered Species, Soc. and Sustainability		FW 350	Available online at OSU
Fisheries and Wildlife Law and Policy		FW 415	Available online at OSU
Intro to Ocean Law		FW 422	Available online at OSU
Intro to US Gov't & Politics		PS 201	Available online at OSU
The Politics of Climate Change		PS 455	Available online at OSU
Global Food Politics and Policy		PS 470	Available online at OSU
U.S. Energy Policy		PS 473	Available online at OSU
Environmental Politics and Policy		PS 475	Available online at OSU
Int'l Environmental Politics and Policy		PS 477	Available online at OSU
Renewable Energy Policy		PS 478	Available online at OSU
NR Management: Choose 11 credits		F3 470	Available offilite at 030
Field Methods in Plant Ecology		BOT 440	Available online at OSU
Environmental Case Studies		ENSC 321	Available online at OSU
Wildland Fire Ecology		FES 440	Available online at OSU
Urban Forest Planning, Policy, and Mgmt		FES/HORT 455	Available online at OSU
Ecological Restoration		FES/FW 445	Available online at OSU
Topics in Wildland Fire	FOR 110 + FOR 210	FOR 346	Available online at OSU
•	FOR 110 + FOR 210	FOR 436	
Wildland Fire Science and Management		FW 303	Available online at OSU  Available online at OSU
Survey of Geographic Information Systems			
Applied Community and Ecosystem Ecology		FW 321	Available online at OSU
Global Crises in Resource Ecology		FW 325 FW 326	Available online at OSU
Integrated Watershed Management			Available online at OSU
Wildlife in Agricultural Ecosystems		FW 435	Available online at OSU
Wetlands and Riparian Ecology	CEOC 365	FW 479	Available online at OSU
Foundations of Geospatial Science and GIS	GEOG 265	GEOG 201	Available online at OSU
Intro to Water Science and Policy		GEOG 340	Available online at OSU
Water Resources Management in the US		GEOG 440	Associated and associated
Int'l Water Resource Management		GEOG 441	Available online at OSU
Intro to Non-Profit Management		NMC 311	Available online at OSU
Riparian Ecohydrology and Management		RNG 455	Available online at OSU
Rangeland Management and Planning		RNG 490	Available online at OSU
Wilderness Management		TRAL 352	Available online at OSU

## General Education Courses (called the Baccalaureate Core)

- Complete one course in each Perspective category with no more than two in the same department.
- Full listing of COCC courses that fulfill Bacc Core requirements: <u>admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-central-oregon-community-college</u>

SKILLS COURSES	Math Writing I Writing II Speech (Writing III) Fitness	Completed as part of major: MTH 112Z or higher WR 121Z. Required to transfer. Can be completed as part of major: see advisor Choose one course from Bacc Core link above HPE 295 @ COCC
PERSPECTIVE COURSES	Biological Science Physical Science Additional Biological or Physical Science Cultural Diversity Literature and the Arts Social Processes and Institutions Western Culture	Completed as part of major: Biology I Completed as part of major: Chemistry Completed as part of major: Biology II Choose one course from Bacc Core link above Choose one course from Bacc Core link above Completed as part of major: PS 201 Choose one course from Bacc Core link above
DPD COURSE	Difference, Power, & Discrimination	Can be completed as part of major: see advisor
SYNTHESIS COURSES	Contemporary Global Issues Science, Technology, & Society	Upper division course, take through OSU Upper division course, take through OSU

### **Advising Contacts**

Academic advisors at your community college and OSU are available to answer your questions and assist you in creating a transfer plan. See your community college advisor first and use this Transfer Guide to help you plan. It is important to speak with your OSU academic advisor early on, and often, to ensure correct course selection and sequencing. See visitosu.oregonstate.edu/visit-campus to schedule your personalized visit.

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